

TransApps / AGORA Project

August 2011

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<http://www.cnri.reston.va.us/>

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AGORA

(Apps on a Global Object Repository Architecture)

- Integrated and extensible app marketplace
- Architecture focused on information represented as digital objects
- Can be used for operational data as well as Apps
- Operational support to military entities as a routine extension of its normal capabilities.
- Collaborative environment for user-developer interaction
- Processes for managing apps from submission through accreditation
- Feedback mechanisms



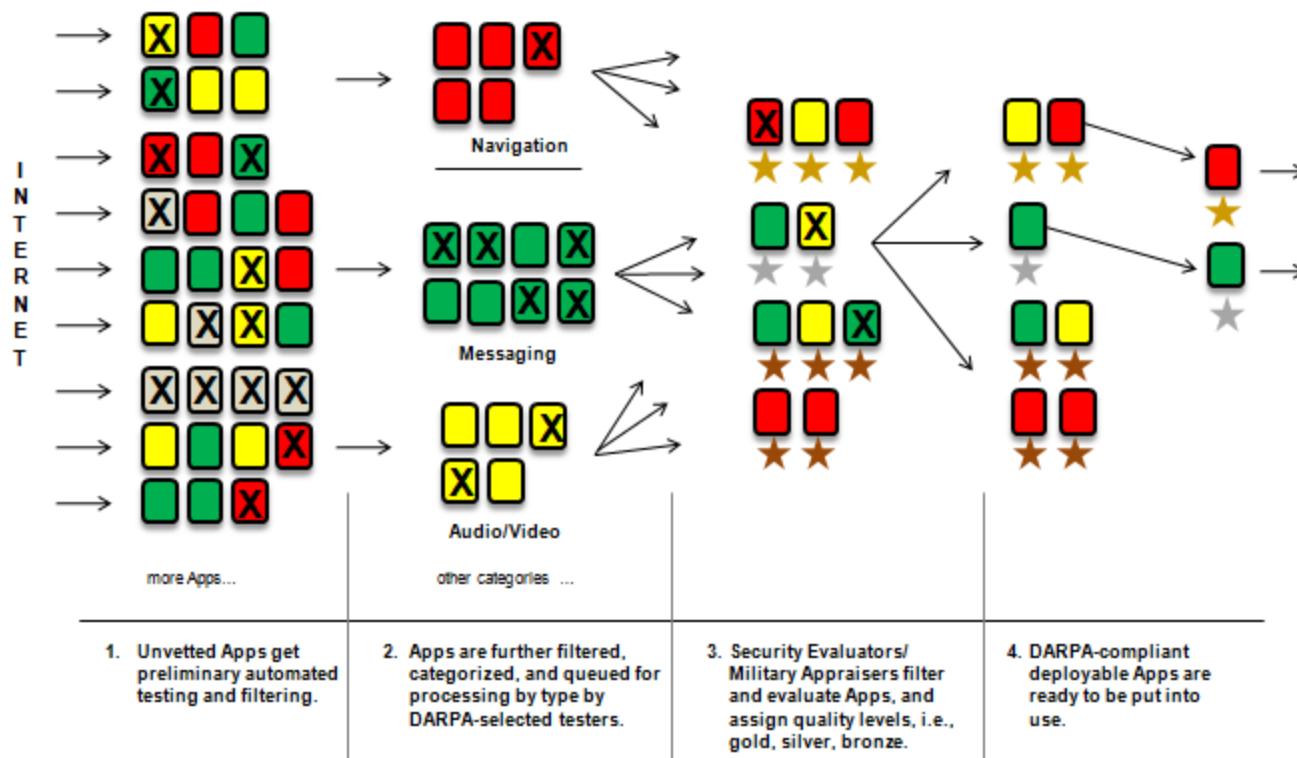
Marketplace Management & Business Model

- Cast the net wide to optimize final set of apps
 - Low, but not zero, barrier to initial submission
 - Multi-stage down-select process
- Flexible support models
 - Multiple compensation models for developers
 - Lower bound on compensation for selected apps
- Protect DARPA's investment
 - Escrow apps for continued use regardless of organizational changes
 - Future Government rights protected
- Developer support
 - Advance mechanism to support development of promising apps
 - Collaborative environment for developers – help them help us

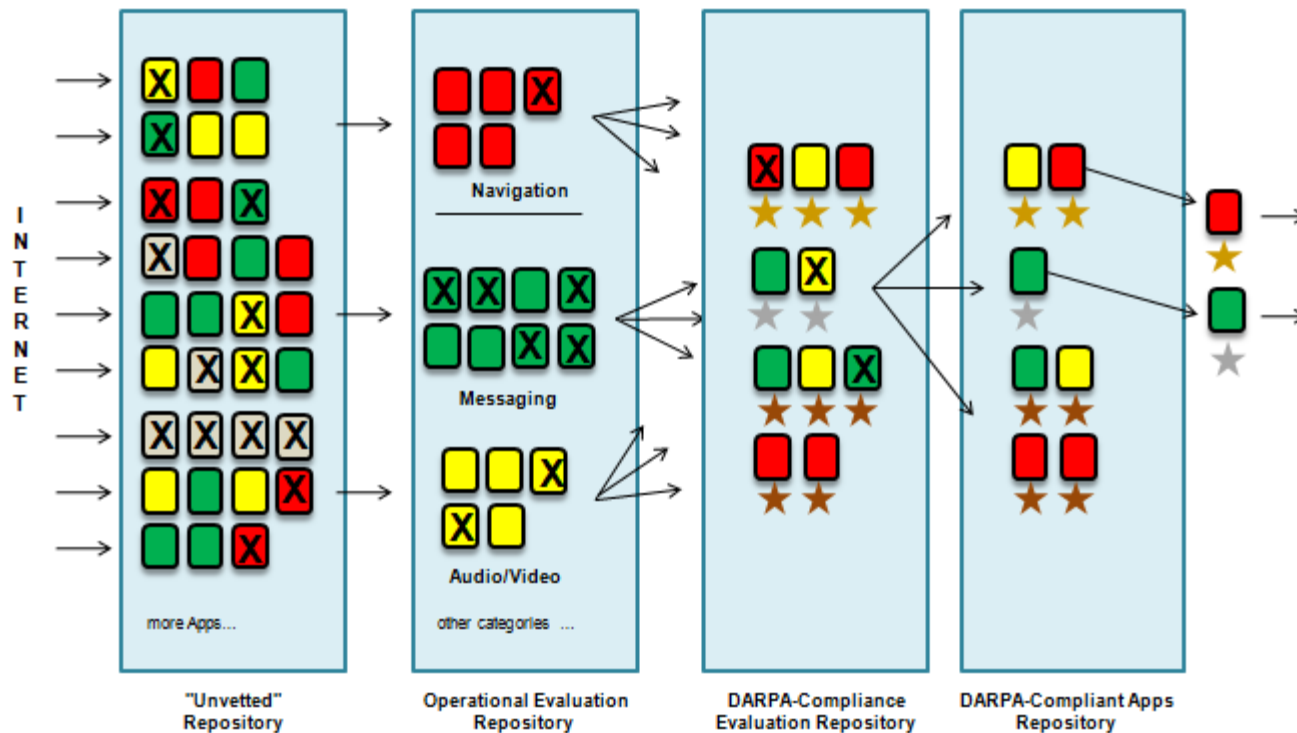


Apps Marketplace Evaluation Process

Evaluation Process for Apps Arrival to Operational Prototype



Apps Marketplace Technical Infrastructure



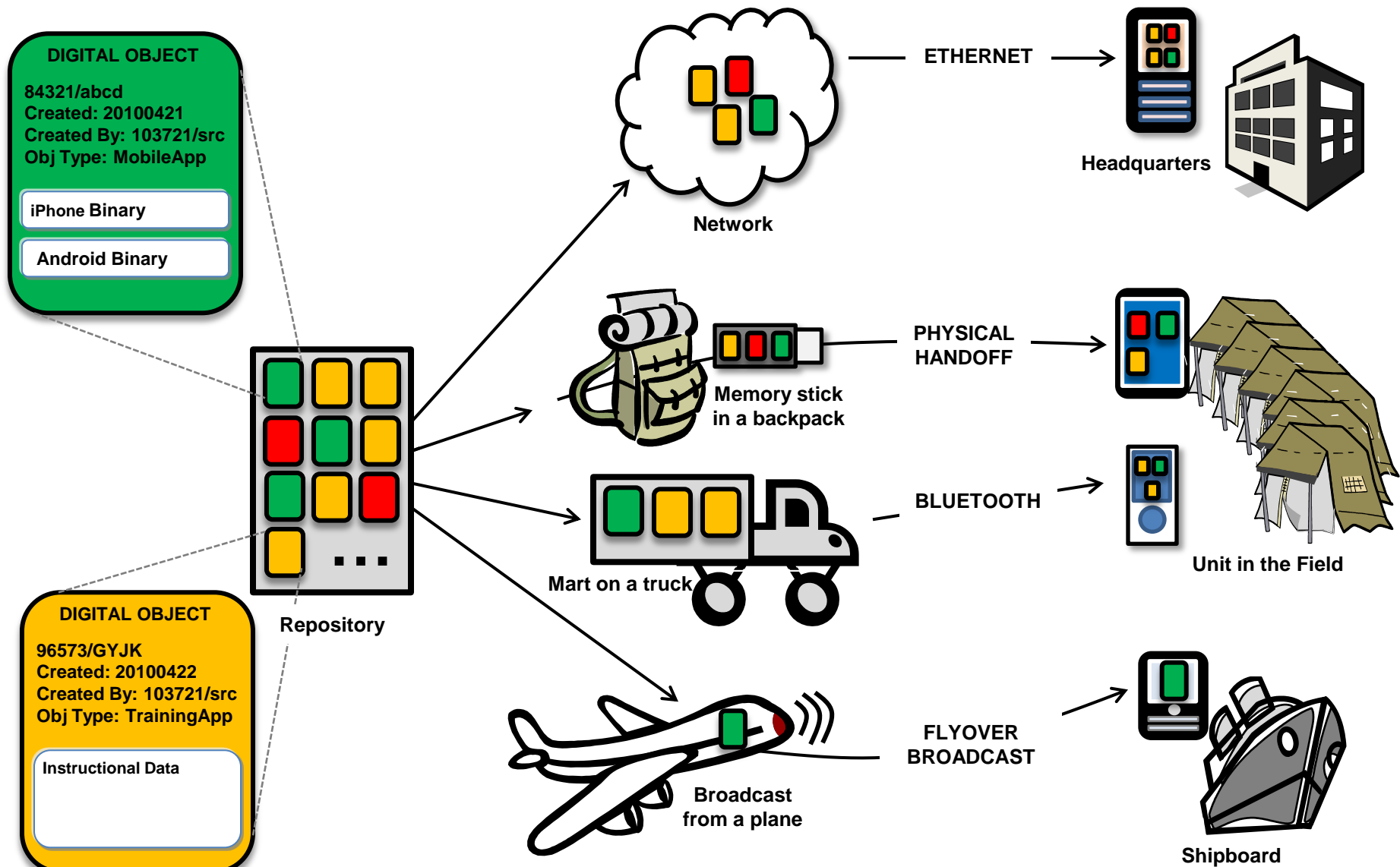
Apps are digital objects and reside in repositories providing access control and security throughout the evaluation process.



Two Key AGORA Concepts

- Knowledge In Time (kit)
 - Just-in-case
 - Prepared for anticipated deployments
 - Just-in-time
 - Key elements populated when mission date, time and location are known
 - Supports role-based provisioning
- Mobile App ReposiTory (mart)
 - Establish a (largely) self-contained community
 - Support for mission deployments
 - Populated with mission relevant kits
 - E.g., medical, engineering, rescue, communication, transportation, sanitation, etc.
 - Capable of delay-tolerant communication





Self-contained objects deliver apps & data over various types of media.

Components of the CNRI Digital Object Architecture

- Handle System
 - Persistent globally unique identifiers for digital objects
 - Secure, robust, reliable resolution of identifiers to current state data
- Repository
 - Management for digital objects
 - Secure access
 - Indexing
- Registry
 - Catalog facility for repository contents
 - Repository federation

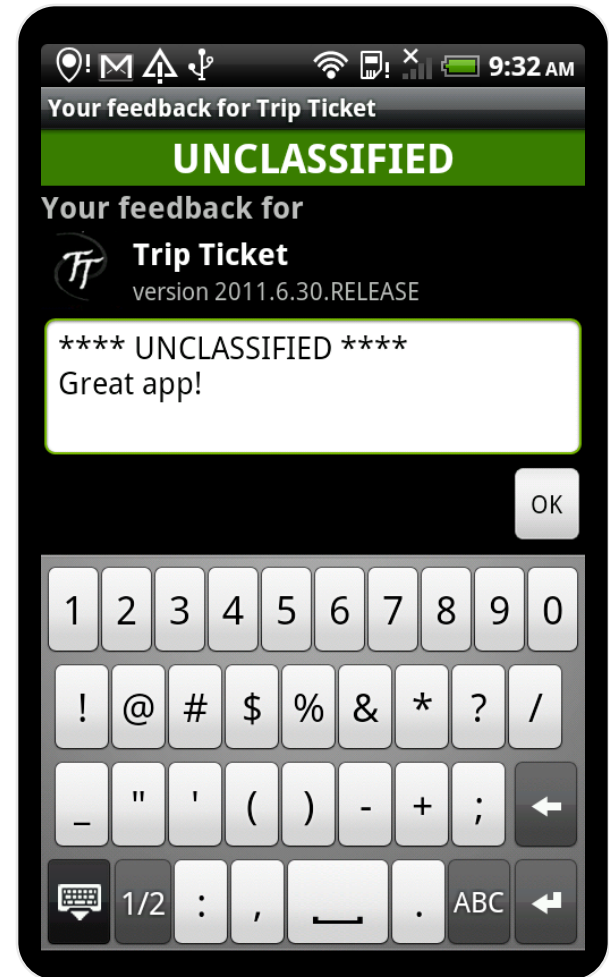
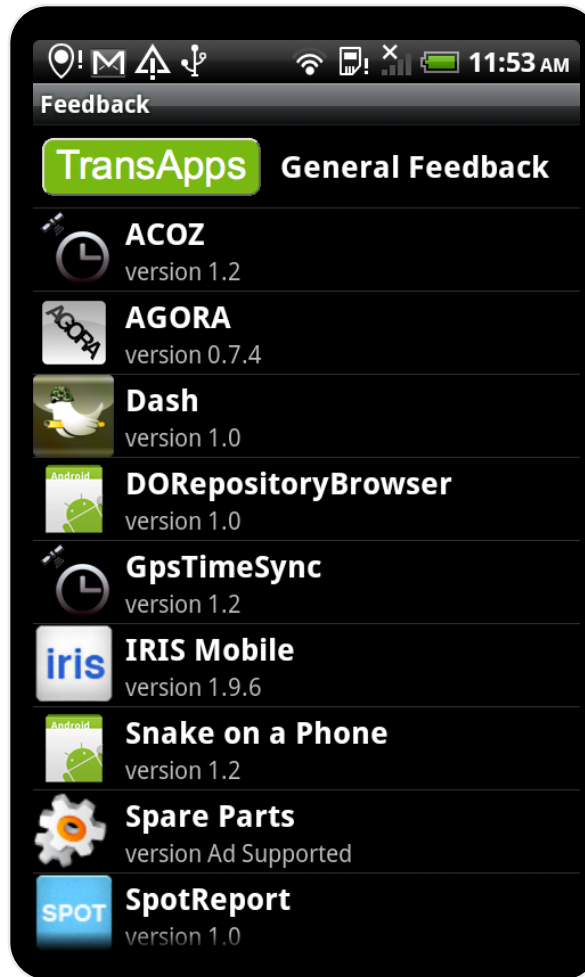
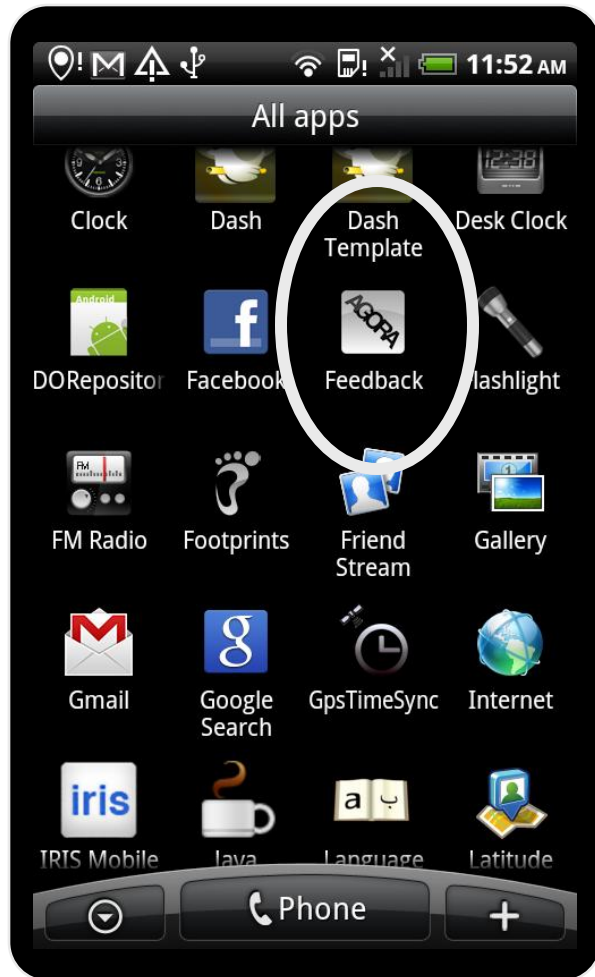


Current Status

- Marketplace is up and running
- Applications are being purchased/licensed and put in the market through the CNRI's Mobilize web site
- Mechanisms and policies for reviewing and evaluating the Apps are in process
 - byte code and source code analysis
 - application inter-dependencies risk analysis
- Marketplace contains a few dozen applications used in theater
- Android devices are being secured
- Handhelds can acquire and update their applications from the Marketplace
- Apps are being tested and used in theater.



Feedback App



TransApps/ADL Collaboration Scenario

